

GP-302133

## TWO RANGE ELECTRICALLY VARIABLE POWER TRANSMISSION

## ABSTRACT OF THE DISCLOSURE

A vehicle powertrain has an electrically variable power transmission, which incorporates two electric power transfer mechanisms, a planetary gearset, an input clutch and an output clutch. A power source 5 continually supplies power to the input clutch and the output clutch is continuously connectible with a transmission output mechanism. One of the planetary gear members is continuously connected with one of the electric power transfer mechanisms and a second of the planetary gear member is continuously connected with the second power transfer mechanism. The 10 clutches are operable to connect the input shaft with two members of the planetary gearset during two ranges of operation and the output clutch is operable to connect two members of the planetary gearset with the output shaft during two ranges of operation.